

Notice of Allowability

Application No.

09/883,839

Examiner

Juliet C. Switzer

Applicant(s)

KREEK ET AL.

Art Unit

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to paper filed 10/28/05 and interview 1/5/06.
2. ☒ The allowed claim(s) is/are 84,86,89,94,96,98,100,101,104,109 and 111.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>0106</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>8/02</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Veronica Mallon on 1/5/05.

The application has been amended as follows:

Claims 87-88, 91-93, 95, 97, 99, 102-103, 105-108, 110, 112-141 were cancelled.

Claims 89, 104, 109 and 111 were replaced with the following claims:

89. An isolated nucleic acid encoding a human mu opioid receptor variant, wherein said variant comprises the amino acid sequence of SEQ ID NO: 2, except that one or more of the following variations is present in the encoded sequence:

- a) the serine at position 23 of SEQ ID NO: 2 is replaced with a proline;
- b) the serine at position 42 of SEQ ID NO: 2 is replaced with a threonine;
- c) the addition of a glycine residue following the glycine at position 63.

104. An isolated nucleic acid which encodes a variant human mu opioid receptor, wherein said variant comprises the amino acid sequence of SEQ ID NO: 2, except that two or more of the following variations is present in the encoded sequence:

- a) the serine at position 23 of SEQ ID NO: 2 is replaced with a proline;
- b) the serine at position 42 of SEQ ID NO: 2 is replaced with a threonine;

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c) the addition of a glycine residue following the glycine at position 63.

109. A cloning or expression vector comprising an isolated nucleic acid encoding a human mu opioid receptor variant and an origin of replication, wherein said nucleic acid comprises a DNA sequence of claim 84 having at least two variations in SEQ ID NO: 1 wherein the two variations are selected from the following variations:

- a) the "T" at position 279 of SEQ ID NO: 1 is replaced with a "C";
- b) the "T" at position 336 of SEQ ID NO: 1 is replaced with an "A";
- c) the "C" at position 365 of SEQ ID NO: 1 is replaced with a "T";
- d) the "G" at position 386 of SEQ ID NO: 1 is replaced with an "A";
- e) the nucleotides "GGC" are inserted following position 401 of SEQ ID NO: 1.

2. It is noted that claim 105 was inadvertently left out of the groupings of claims set forth in the restriction requirement mailed 4/15/05. The claim was rejected in the office action mailed 7/11/05, but indicated as withdrawn on the first page office action summary. This claim is properly included in the elected group. The claim is cancelled with this examiner's amendment, but would have been included with the elected group if prosecution were continued.

3. A new copy of the 1449 filed 8/5/02 is being mailed with this office action. The examiner indicated dates of publication for the two GenBank references on the 1449.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juliet C Switzer whose telephone number is (571) 272-0753. The examiner can normally be reached on Monday through Wednesday, from 9:00 AM until 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached by calling (571) 272-0745.

The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-0507.

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Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.



Juliet C. Switzer
Primary Examiner
Art Unit 1634

January 5, 2006